Listing of Claims:

1. (Previously presented) A tool for graphically defining an expression, said tool comprising:

a graphic user interface (GUI) component comprising:

means, responsive to user input, for generating a graphic definition of the expression by defining a plurality of tree structures comprising a hierarchical series of nodes, and one or more lists comprising a plurality of items, each list item being associated with a respective node of an associated tree structure, wherein at least one of the tree structures represents an input data structure and at least one other tree structure represents an output data structure wherein any associated list item defines a formatting definition;

an expression generator component adapted to read the graphic definition of the expression provided by a user through said GUI component, expression generator component comprising:

means for analyzing said graphic definition and generating an expression based on the structure of each tree and any list items associated with respective nodes of a tree.

2. (original): The tool according to claim 1 wherein said expression is adapted to configure one of a plurality of nodes of a relational message broker, a message broker or database query.

3. (original): The tool according to claim 2 wherein said expression is an SQL3 expression.

4. (original): The tool according to claim 1, where said nodes comprise leaf and branch nodes, said branch nodes representing complex structured fields and said leaf nodes representing simple fields comprising one of a string, integer, real or a date.

5. (original): The tool according to claim 4 wherein each list item comprises an expression.

6. (original) The tool according to claim 5 wherein said GUI component is adapted to allow a user to define a tree structure representing an input data structure wherein any associated list item defines a filtering constraint.

7. (Previously presented): The tool according to claim 1 wherein said GUI component is adapted to allow a user to define two or more input tree structures, each having an associated list, at least one list item associated with a first node of a first input tree structure identifying a second node of second input tree structure from which said expression generator generates an expression joining said two input tree structures on said nodes.

8. (Previously presented): The tool according to claim 1 wherein said GUI component is adapted to allow a user to define an input tree structure having two or more associated lists, at least one list item from each list comprising an expression from which said expression generator generates a logical OR expression.

9. (Previously presented): The tool according to claim 1 wherein said GUI component is adapted to allow a user to graphically link two or more nodes within one or more input tree structures from which said expression generator generates a logical expression limiting said nodes to equality.

10. (canceled)

11. (Previously presented): The tool according to claim 1 wherein said GUI component is adapted to allow a user to define an input tree structure and an output tree structure, each having an associated list, at least one of said list items for said output tree structure identifying a node of said input tree structure.

12. (Previously presented): The tool according to claim 1 wherein said GUI component is adapted to display a list for an output tree to the left of the tree.

13. (Previously presented): The tool according to claim 1 wherein said GUI component is adapted to allow a user to define a list item comprising a free variable, said free variable representing the associated tree structure node within said graphical definition.

14. (Previously presented): The tool according to claim 1 wherein said GUI component is adapted to allow a user to define a tree structure comprising a node represented by a wildcard symbol, said wildcard symbol representing said node and all otherwise undefined sub-structures of said node.

15. (original): The tool according to claim 14 wherein said GUI component is adapted to allow a user to define a structure comprising a branch node having a sub-structure comprising one or more defined nodes and a node represented by a wildcard symbol.

16. (original): The tool according to claim 1 wherein said analyzing means is cooperable with a grammatical definition of said graphic definition to generate said expression.

17. (original): The tool according to claim 2 wherein one of said nodes comprises a filter for filtering XML messages.

18. (Previously presented): A method for graphically defining an expression in accordance with a graphic definition comprising the steps of:

(a) defining a plurality of tree structures comprising a hierarchical series of nodes, and one or more lists comprising a plurality of items, each list item being associated with a respective node of an associated tree structure, wherein at least one of the tree structures represents an input data structure and at least one other tree structure represents an output data structure wherein any associated list item defines a formatting definition;

(b) analyzing said graphic definition; and

(c) generating an expression based on the structure of each tree and any list items associated with respective nodes of a tree.

19. (Previously presented): A computer readable medium containing program instructions for graphically defining an expression in accordance with a graphic definition, the program instructions for:

defining a plurality of tree structures comprising a hierarchical series of nodes, and one or more lists comprising a plurality of items, each list item being associated with a respective node of an associated tree structure, wherein at least one of the tree structures represents an input data structure and at least one other tree structure represents an output data structure wherein any associated list item defines a formatting definition;

analyzing said graphic definition; and

generating an expression based on the structure of each tree and any list items associated with respective nodes of a tree.

20. (Previously presented): A system for graphically defining an expression in accordance with a graphic definition comprising:

means for defining a plurality of tree structures comprising a hierarchical series of nodes, and one or more lists comprising a plurality of items responsive to user input, each list item being associated with a respective node of an associated tree structure, wherein at least one of the tree structures represents an input data structure and at least one other tree structure represents an output data structure wherein any associated list item defines a formatting definition;

means for analyzing said graphic definition; and

means for generating an expression based on the structure of each tree and any list items associated with respective nodes of a tree.